

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/20/2010 has been entered.
2. Claims 1 and 3-24 are pending.

Response to Arguments

3. Applicant's arguments with respect to the prior art rejections of the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 1, 3-10, 15, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman et al (US Pat. 6,243,707), hereafter

Art Unit: 2452

“Humpleman,” in view of Nelson et al (US Pub. No. 2003/234737), hereafter “Nelson.”

6. As to claim 1, Humpleman discloses a remote control service processing device in a home network environment (Abstract), comprising:

an interface for a data exchange between a plurality of types of devices which are designed to respond to a remote control command received through the network (column 4, lines 54-63);

a storage unit which stores remote control service list information which represents a function responding to a remote controller of the respective devices connected in the network by matching the remote control list information to information of each of the respective devices (column 7, lines 38-48, HTML files store remote control service list information and said HTML files are stored at a home device (column 7, lines 19-21), thus making a storage unit inherent); and

a control unit which collects the remote control service list information from the respective devices, stores the collected information in the storage unit (column 14, lines 21-29), generates a remote service menu as a graphic user interface using the collected information (column 14, lines 21-29, HTML page lists various commands (i.e. a menu) that correspond to the commands for the devices) and provides a certain device in the network with a remote control service to remote control at least one of the respective devices through the graphic user interface (column 7, lines 38-48 and column 14, lines 30-34),

wherein the control unit comprises:

a database server which collects the remote control service list information and manages the collected information (column 14, lines 38-42, the session manager inherently manages function information as it sends command and control information to the managed devices; such information is collected as shown in column 9, lines 43-48, where the session manager is aware of the capabilities of the devices, which would require collection and storage of “remote control service list information”); and

a remote control proxy server which provides the certain device with the remote control service in accordance with the remote control service list information collected through the database server, and upon receiving from the certain device a request for the remote control through the remote control service, reads a remote control command from the database server in accordance with the remote control request (request (column 14, lines 38-42, command and control signals are inherently read from the database in the session manager as they are sent from the session manager; such information is collected as shown in column 9, lines 43-48, where the session manager is aware of the capabilities of the devices, which would require collection and storage of “remote control service list information”), and transmits the remote control command to the corresponding device (column 14, lines 38-42).

But, Humpleman does not explicitly disclose the central storage unit stores remote control service list information which represents a function responding to a remote controller of *each of the respective devices* connected in the network nor does Humpleman disclose the database server matches received device information with the remote control service list information in order to register in a database of the central storage unit. Rather, in Humpleman each of the respective devices remote control service list information is stored local to each device, and therefore is not centralized in one storage unit and therefore Humpleman is additionally silent with regards to any matching or registering.

However, Nelson discloses the central storage unit stores remote control service list information which represents a function responding to a remote controller of each of the respective devices connected in the network ([0027], lines 5-11, command sets (remote control service list information) are received from respective devices) and a database server matches received device information with the remote control service list information in order to register in a database of the central storage unit ([0027], lines 5-11, device information is received along with the remote control service list information as it would be necessary to organize the devices into groups as disclosed in [0027], lines 28-35).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Humpleman and Nelson in order to centralize the storage of remote control function information thereby allowing for easier management and manipulation of that information (i.e. a user need not access each device individually in order to make respective changes).

7. As to claim 3, Humpleman discloses the database server maps an icon in correspondence with each device (column 13, lines 54-58).
8. As to claim 4, Humpleman discloses the remote control proxy server provides the remote control service so as to enable the certain device to select through the icon a device for remote control (column 13, line 64-column 14, line 5).
9. As to claim 5, Humpleman discloses the remote control proxy server provides an icon representation selection tool as the remote control service, with which a user can selectively display the icon (column 14, lines 6-18).
10. As to claim 6, Humpleman discloses when an information regarding the selection of the icon is received from the certain device, the remote control proxy server provides the remote control service so that a remote control service page can be displayed to display the remote control service list of the device corresponding to

the icon (column 13, lines 45-58, icons are linked to device homepages which have control commands for that particular device, e.g. Fig. 13).

11. As to claim 7, Humpleman discloses the remote control proxy server provides the certain device with a remote control service selection item in the form of a list together with other available services (column 18, lines 48-55 and Fig 13, various commands can be given to the DVCR).

12. As to claim 8, Humpleman discloses when an information regarding the selection from the remote control service item is received from the service list, the remote control proxy server provides a remote control service setting menu for the user to set functions of the respective devices in the network (column 18, lines 48-55 and Fig. 13, commands are listed for a device, in this example the DVCR), and provides a first remote control service page for displaying a remote control service provision menu for the functions of the devices registered through the remote control service setting menu (Fig. 12A and column 18, lines 4-8, a user can select any of the devices controlled by the system).

13. As to claim 9, Humpleman discloses when an information regarding the selection from the remote control service setting menu is received, the remote control proxy server provides a second remote control service page which matches the function lists of the respective devices with the devices and represents the result

(Fig. 12A, Fig. 12 column 18, lines 4-16, in this example a user selects the DVCR page, and now the functions available to the DVCR are displayed).

14. As to claim 10, Humpleman discloses when a control signal is input in accordance with the function selection of the respective devices in a state that the second remote control service page is displayed, the remote control proxy server provides the remote control service so that a function corresponding to the control signal among the remote control service list displayed on the second remote control service page is marked (Fig. 12A, Fig. 12 column 18, lines 4-16).

15. As to claim 15, Humpleman discloses when an information regarding the selection from the remote control service setting menu is received, the remote control proxy server provides a second remote control service page to separately display a device corresponding to the control signal in accordance with a function selection of the respective device, and functions corresponding to the control signal (Fig. 13 and column 18, lines 48-55).

16. As to claim 23, Humpleman discloses the certain device is a device having a display (column 7, lines 38-48).

Art Unit: 2452

17. As to claim 24, Humpleman discloses said remote control service processing device is said certain device (column 7, lines 38-48, display device provides interface to input commands).

18. Claims 11-14 and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman in view of Nelson as applied to claims 1-10 above, and further in view of what was well known in the art at the time of the invention.

19. As to claim 11, Humpleman and Nelson disclose the invention substantially with regard to the parent claim 10, and further discloses respective devices in the home network that have names that can be changed (Humpleman, Fig. 8, label 712, names of are obviously user created).

However, Humpleman and Nelson do not disclose specifics with how those names can be changed specifically with regards to when a confirm button is selected, the database server generates a new identifier with respect to the functions in marking and the respective devices, matches and registers the functions in marking with the generated identifier. Simply, adding a confirm button when modifying the device identifiers in Humpleman would have been an obvious modification to one of ordinary skill in the art at the time of the invention. Therefore, Official Notice is taken, that combining the teachings of Humpleman

Art Unit: 2452

with a well-known practice in the art (the use of a confirm button) would have been obvious to one of ordinary skill in the art at the time of the invention.

20. As to claims 12 and 17, Humpleman and Nelson disclose the database server registers the identifier as a device identifier (Humpleman, Fig. 8, label 712, names of are obviously user created and assigned to a specific device).

21. As to claims 13 and 19, Humpleman and Nelson disclose the remote control service provision menu is selected, the remote control proxy server provides a third remote control service page so that the devices registered in the database server are displayed (Humpleman, Fig. 12A, label 1004 with labels 1014, 1016, 1018, and 1020 denoting the devices registered in the database).

22. As to claims 14 and 18, Humpleman and Nelson disclose when an information regarding a remote control request is received from the certain device to the respective device which is registered with the identifier, the remote control proxy server transmits the remote control command sequentially and at a predetermined time interval to the respective device with respect to the function matched and registered with the identifier (Humpleman, Fig. 13, label 1006, commands are given to DVCR via the GUI).

Art Unit: 2452

23. As to claim 16, it is rejected by the same rationale set forth in claim 11's rejection.

24. As to claim 20, Humpleman and Nelson disclose the database server maps an icon for each device (Humpleman, column 13, lines 54-58).

25. As to claim 21, Humpleman and Nelson disclose the remote control proxy server provides the remote control service so that the certain device can select the icon of one of said devices wanted for remote control during the execution of the function of the certain device (Humpleman, column 13, line 64-column 14, line 5).

26. As to claim 22, Humpleman and Nelson disclose when an information regarding the selection of one of said icons is received from the certain device, the remote control proxy server provides a third remote control service page so that the device and the function corresponding to the selected icon can be matched with each other and displayed (Humpleman, Fig. 13, label 1006 and column 18, lines 48-55).

Conclusion

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is

Art Unit: 2452

571-270-1246. The examiner can normally be reached on Monday thru Friday;
9:00am - 5:00pm.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on 571-272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. J. D./
Examiner, Art Unit 2452

/DOHM CHANKONG/
Primary Examiner, Art Unit 2452